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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,431

07/05/2005

Ermanno Filippi

9526-60

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7590

01/13/2009

AKERMAN SENTERFITT

P.O. BOX 3188

WEST PALM BEACH, FL 33402-3188

EXAMINER

NGUYEN, HUY TRAM

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

01/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,431	Applicant(s) FILIPPI ET AL.	
	Examiner HUY-TRAM NGUYEN	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see the Remarks, filed on November 5, 2008, with respect to the rejection(s) of claim(s) 1-7 under 35 U.S.C. 102(b) or 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of **Filippi et al. (US 2002/0018740 A1) and Application No. 11/572,403.**

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 2, 3, and 4 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/572,403. Although the conflicting claims are not identical, they are

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not patentably distinct from each other because Claim 1 of the application No.

11/572,403 comprises all the limitations of the present claims 1, 2, 3 and 4.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claim 5 and 6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 11/572,403. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claim 2 of the application No.

11/572,403 comprises all the limitations of the present claims 5 and 6.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by **Filippi et al. (US 2002/0018740 A1)**.

Regarding Claim 1, Filippi et al. reference discloses a pseudo-isothermal radial chemical reactor for catalytic reactions, comprising

a substantially cylindrical shell closed at the opposite ends by respective base plates (**Figures 1 and 3**).

a reaction zone comprising a respective catalytic bed and a plurality of heat exchangers placed in said respective catalytic bed (**Figure 1, numerals 9 - Heat exchangers and 10- catalytic bed and Figure 3, the first catalytic bed and heat exchangers**); and

at least one second further reaction zone comprising a respective catalytic and a plurality of heat exchangers placed in said respective catalytic bed of said second reaction zone (Figure 3), said first and said second reaction zone being in fluid communication with each other (**Figure 3, numerals 4-gaseous reactants and 7 - product outlet and Page 4, Paragraph [0087]**).

Regarding Claim 2, Filippi et al. reference discloses the chemical reactor according to claim 1, wherein said first and said second reaction zone are associated in series (**Figure 3 and Page 3, Paragraph [0064]**).

Regarding Claim 3, Filippi et al. reference discloses the chemical reactor according to claim 2, wherein the plurality of heat exchangers of at least one of said reaction zones is in fluid communication with the outside (**Figures 1 and 3 – numeral 6, HX fluid inlet**).

Regarding Claim 5, Filippi et al. reference discloses the chemical reactor according to claim 4, wherein at least one exchanger of said pluralities of heat exchangers is plate-shaped, rectangular and boxed (**Pages 1-2, Paragraph [0024], [0025] & [0026] – plated heat exchanger**).

Regarding Claim 6, Filippi et al. reference discloses the chemical reactor according to claim 5, wherein said plurality of exchangers is arranged radially, coaxially with respect to the axis of the reactor **(Figure 4)**.

Regarding Claim 7, Filippi et al. reference discloses a method for optimizing pseudo-isothermal catalytic reactions, comprising the steps of:

feeding reactants to a reaction zone comprising a catalytic bed and a plurality of heat exchangers placed in said catalytic bed **(Figures 1, 3 and 4, numeral 4 – gaseous reactants)**;

collecting reactants and products coming from the reaction zone **(Page 4, Paragraph [0090])**;

conveying said reactants and products to a second reaction zone comprising a respective catalytic bed and a respective plurality of heat exchangers placed in said catalytic bed **(Figure 3)**; and

feeding said reactants and products to said second reaction zone and completing the reaction in said catalytic bed **(Page 4, Paragraph [0087] – the gaseous reactants cross sequentially a number of catalytic layers 10)**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY-TRAM NGUYEN whose telephone number is (571)270-3167. The examiner can normally be reached on MON- THURS: 6:30 AM - 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HTN
1/12/09

/Walter D. Griffin/
Supervisory Patent Examiner, Art Unit 1797